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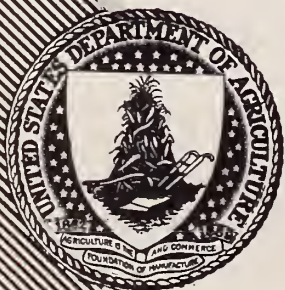
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# MARKETING ACTIVITIES



U. S. Department of Agriculture  
Production and Marketing Administration  
Washington 25, D.C.



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### TRAINING SPARKS POULTRY SALES

By Earl H. Rinear . . . . . Page 3

Picture two dozen retailers on the edge of their chairs--watching a fellow trainee and an instructor turn out something new in chicken cutting, pricing, and display. That's a preview of the poultry merchandising classes just starting for thousands of retailers. Mr. Rinear, of the Poultry Branch's Research Division, is in direct charge of the related research work.

### WANTED: LOCAL MARKET INFORMATION

By Leighton G. Foster . . . . . Page 5

Something is being done to bring market information in line with the trend toward decentralization taking place in the buying and selling of agricultural products. Mr. Foster is in charge of PMA's State Marketing Services Staff which handles Research and Marketing Act work of this nature.

### WHAT'S IN COLD STORAGE?

By Martin J. Hudtloff . . . . . Page 12

If old Mother Hubbard had been reading the Cold Storage Report she wouldn't have made that useless trip to the larder, and there wouldn't have been any disappointed dog. Mr. Hudtloff is Director of the PMA's Transportation and Warehousing Branch which prepares the reports.

### PROGRESS IN EGG PACKAGING

By O. F. Johndrew, Jr. . . . . Page 15

From 15's or 30's to 2x6's to you is one way of describing today's packaging cycle of an egg. Once it was a lot different, as Mr. Johndrew of PMA's Poultry Branch points out.

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## MARKETING ACTIVITIES

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# Training Sparks Poultry Sales

By Earl H. Rinear

How to win customers and sell more chicken might be one way to describe the goals of a nation-wide poultry program that opened formally in St. Louis on January 15. School will be keeping (day and night) to teach the finer points of chicken salesmanship--how to cut up a chicken so as to yield the maximum in cuts consumers like best; how to obtain the highest quality poultry possible, and how to keep it that way; how to display and sell chickens at their best; and finally, in the most honorable sense of the word, how to "sell" a customer.



Under close supervision two trainees cut up and bone turkey for "parts" and "roll roasts" at the retailer school.

The classes are conducted by the Poultry and Egg National Board, under a contract with the U. S. Department of Agriculture and under authority of the Research and Marketing Act. Training is based on the latest and best information available on poultry merchandising and is free to retailers. Products and facilities for the schools are supplied by the industry while the Government furnishes the instructors.

## Classes Are Booming

The response thus far to the classes has been enthusiastic. First reports from the St. Louis sessions indicate that total attendance there will number about 800 retailers. Classes scheduled to begin in Kansas City on February 5th are expected to attract more than 1,000! Enrollment per period has been limited to 25 trainees in order to permit every one of them to "get into the act."

Good salesmanship of poultry products can well have significance even beyond the desirable objectives of increased returns to producers, reduced



handling costs, and consumer satisfaction. Production of broilers and fryers is a highly flexible enterprise. In times of increasing demands on more inflexible livestock numbers, greater consumption of chicken meat can help to ease this pressure and to counterbalance the general trend of rising meat prices.

Stores operated by the trainees will be studied prior to and after the classes to find out just how much the training will increase business volume--and how it will reduce costs and waste. So far, the results show that better handling practices and more skillful cutting and pricing methods can mean more meat for consumers--a worthy development in a national emergency.

Based on the experimental classes held thus far, the training has definitely proved itself too, as a means of increasing sales. One retailer, skeptical of his ability to sell chickens, advised the training director at the outset that he couldn't afford to give poultry more than one foot of his 10-foot display case. His attitude changed, however, when he saw the attractiveness of a display of chicken wings and legs and he decided he could afford to devote another foot to the display of necks, backs and breasts. When that sales display had been set up his confidence rose even further and he wanted a third foot devoted to giblets and cut-up whole chickens, and packed chickens. This man had been selling 12 to 15 chickens a week. His entire new display of 24 chickens was sold in less than one day!

Another retailer who tried out the recommended display methods increased his sales by three hundred percent in the first week of trial.

### "Learning by Doing"

While the new merchandising program was not launched formally until mid-January in St. Louis, the kickoff was preceded by pilot classes conducted in Aurora and Joliet, Ill. One principal aim of these preliminary classes was to determine what could be concentrated into the brief sessions. It was concluded that the best method was to follow the principle of "learning by doing" which has proved so effective in similar training classes for retailers of fresh fruits and vegetables. Under watchful supervision each trainee candles eggs, cuts up chicken and turkey and arranges displays. In each area where classes are to be held, the courses will be adapted to suit the regional desires of consumers, the local supplies of poultry products, and retailer trainees.

Classes consist of either one full eight-hour day of training or two evenings, each lasting three and one-half hours. The number of "pupils" in each class is limited to make it possible for each trainee to cut up, tray-pack and wrap a chicken, candle eggs, build displays and compute costs and prices.

Surprising to some perhaps will be the emphasis placed on this job of accounting in poultry retailing classes. Trainees are taught adequate methods of record-keeping; how to purchase chickens so that volume of purchase will be in proper proportion to turnover and the poultry supply will be constant but not excessive to the point of risking spoilage.



Trainees are taught how to figure prices on the basis of estimated cost to them of each of the different parts of the chicken--and how to determine retail prices for those different parts when they are separately merchandised. A chart has been developed for use by the retailers in making this computation which relates the weight percentage of individual pieces of chicken to the whole bird when cut up to the best advantage. These figures have been based on systematic cuttings of hundreds of chickens in tests made before the classes began.

#### Chart Is Price Guide

Generally, it has turned out that most meat cutters perform the "butcher cut" in carving a chicken. While the system has worked for whole chickens, it is not suitable to chicken part sale because carcass weight here must be distributed largely to legs and breasts. That's where the chart comes into the picture --and as one retailer said, "it gives us a working basis to cut a profit" out of a chicken. The turkey cutting procedure is equally as effective.



Intense interest, such as that reflected here, has greeted every phase of the retailer training program.

At every opportunity during the course of training, emphasis is placed on sanitation and cleanliness. Retailers are cautioned against practices which contribute to insanitation, such as the evisceration of chickens in stores.

Proper refrigeration practices, too, come in for repeated emphasis, with regard to both poultry meat and eggs. Trainees are advised to display fresh chickens lying on ice, and packaged chickens under mechanical refrigeration. Temperature levels that insure the longest case life are stressed.

#### Some Good Egg Sense

Maximum egg sales, the trainees are told, are not only tied to good handling practices, but also to the handling of the best eggs obtainable. Ungraded eggs may be costly to merchandise for the double reason that spoilage is high and poor quality drives away customers.

In the course, trainees are taught the fundamentals of candling and grading, not to make candlers or graders out of them, but to show them

"what's inside an egg and how eggs must be cared for." The attitude of many of the retailers is reflected by one's comment, "Buying eggs hit and miss is out of the question for me from now on--I'm going to be sure of my source of supply."

Retailers are advised to keep their eggs at temperatures between 45 and 50 degrees Fahrenheit, and in addition, they are shown the most practical way to use the facilities available in their individual stores. Where temperature cannot be controlled adequately, trainees are advised to limit their buying to fit their equipment for carrying eggs.

### How About a Turkey Roll Roast?

As if enough instruction weren't already crammed into a busy eight hours, some of the newer sales techniques are emphasized: the "tie-in", featuring eggs and sausage, ham and eggs and bacon and eggs; the trend toward more cut-up and prepackaged merchandising of chicken; and the more recent sales practice of preparing a roast of about  $1\frac{1}{2}$  pounds from the thigh and other pieces of a turkey, turkey steaks, or the boneless roll roast of turkey breast which averages about 9 pounds.

Classes are sponsored in each city by a group having a definite interest in the poultry trade, and will include poultry and egg wholesalers, distributors and processors, and cooperatives. The classes are planned so that they can be coordinated with the programs of extension services, State departments of agriculture, and similar agencies which already are giving valuable assistance in the work. The sponsoring group provides the chickens and turkeys to cut-up, as well as the room and equipment for the classes.

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### GOBBLEDEGOOK PUT TO WORK

Meat packers have, as the saying goes, "saved everything in a hog except the squeal." We always thought that was about the ultimate in processing efficiency. Now it looks like the poultry boys have gone them one better.

No, they're not canning cackles these days, but they're coming close. One ingenious midwestern retailer, equipped to handle lots of turkeys for the holiday trade, decided to put the gobbler to work. Armed with a recording machine he moved into the turkey range of one of his farmer suppliers and recorded 30 seconds of turkey talk. Apparently realizing that something special was in the wind, the turkeys put on quite a show.

Back at the store during the holiday shopping rush he played the record every 30 minutes. "Everybody loved it," he said. "Why, we sold 25 turkeys every time we turned it on!" Why didn't he play it oftener? Well, being a fair man, hearing those turkeys talk themselves into the oven just got on his nerves.



# Wanted: Local Market Information

By Leighton G. Foster

Harry Johnson of North Bend, Indiana, had a good cantaloup crop this summer. All during the growing season he felt sure that he would have a good harvest, but as his crop reached maturity he was beset with his usual harvest-time worries. Would he be able to get crates? Where should he take his melons to get the best price? Would he be able to get transportation for them at the time they were ready to harvest--when most of his neighbors also would have cantaloupes to move?

Much of his worrying was needless, however. As it turned out, the day that his melons were ready there was a truck at his place to load them. The sale had been made a few days previously after negotiations that began with an unexpected telephone call from a supermarket buyer in Chicago.

## Buyers Represent Many Firms

The same thing happened at the farms of his neighbors, although the trucks that loaded at the different farms were not from the same firm. In fact, they represented a lot of different buyers. One was from a chain of restaurants in Ohio. Two or three of the trucks were picking up cantaloupes for delivery to a Midwest grocery store chain. A couple of other trucks were from wholesalers in Indianapolis. Several other truckers were buying for themselves for resale wherever they could find a buyer, in or out of the State.

All in all, it was a good harvest for Harry and his neighbors. They received a good price for their cantaloupes, and without many of their annual marketing headaches.

Back of all of these developments was something Farmer Johnson may not even have known about. Two or three weeks before his cantaloupes were ready for harvest, Purdue University, which conducts the marketing service program in Indiana, had put out a timely produce supply report containing a short item headed "Cantaloupes." It read something like this:

"Delair County reports cantaloup harvest will be completed with a few available this week. The county agricultural agent of North Bend County reports cantaloupes (mostly Honey Rocks) will be ready for sale next week and during the week of August 21 in truckload quantities."

This produce supply report has a wide circulation among buyers of farm products both within and outside Indiana. Among those who read the

item, was a dealer, who, after checking with the North Bend County Agent to get the names of producers with cantaloups to sell, called farmer Johnson and bought his melons. The buyer sent his own truck to transport them to his Chicago supermarket.

Of course there is no farmer Harry Johnson near "North Bend," Indiana, but the "good luck" which befell fictitious farmer Johnson and his equally fictitious neighbors has become a factual reality for many farmers and handlers not only in Indiana, but in several other States. And this "luck" in marketing was not confined to cantaloups, but included a number of other crops, all of which were marketed through direct sales by producers and handlers to buyers.

There is nothing fictitious about the produce supply report giving "spot" market information which is put out by Purdue University. Issued weekly, it lists, in season, and by counties, the various farm crops that are available, or shortly will be available for sale. For instance, the bulletin of August 14, 1950, which incidentally is headed: "Produce Supply Report--Distributor's Report," listed not only cantaloups, but also peaches, watermelons, early apples and miscellaneous vegetables. The release usually gives the names of County Agents who could be contacted by a buyer who wants to get directly in touch with a producer.

#### Form Varies; Goal the Same

This report has its counterpart in a number of other States. While none of them follow the same format, they are all designed with one purpose in mind: To provide local or area market information for farm commodities which will be of service and benefit to producers, handlers, and all buyers of such commodities. And, these reports, bulletins, sales lists, or whatever you might wish to call them, are only a part of this new service building up to meet the growing need for information on area or "at-the-farm" sales of agricultural commodities. Also playing an important role in this development are the phone calls, interviews, and even the "grapevine" type of information never recorded formally.

Some of the people who have been working in agricultural marketing over a long period of years consider this change in marketing the beginning of a trend which may have far reaching consequences. Certainly, it eliminates some of the problems which have existed on the marketing path between the producer and retailer over a long period of years. At the same time, it is raising new problems, one of which is that of furnishing producers and buyers with a type of market information which will enable them to participate in such trading on an intelligent and equal basis. This rapid exchange of information between producers and buyers is being encouraged by both interested State agencies and through Production and Marketing Administration programs made possible under the Research and Marketing Act of 1946.

There seems to be no doubt that farm crops are getting better distribution in the several States which now are furnishing spot local market information on available supplies, prices, and other marketing factors.



THIS REPORT SENT TO BUYERS  
OF AGRICULTURAL PRODUCTS IN OVER TWENTY STATES

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FRUIT, VEGETABLE AND OTHER PRODUCTS AVAILABLE DURING THE MONTH OF DECEMBER  
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KIND OF PRODUCTS	APPROXIMATE ACREAGE OR QUANTITY	LOCATION OF PRODUCTS	WHOM TO CONTACT FOR INFORMATION ON AVAILABLE PRODUCTS
Collard, Greens	5 Acres	Ramsey	R. L. Street, Ramsey; G. S. Humphrey, County Agent, Burton.
Okra	10 Acres	Alden	G. S. Humphrey, Alden; Grover L. Semack, Drayton.
Sweet Potatoes	Carloads & Truckloads	Diketon, Somerset, Sewanee, Arn- old, Bryan.	Clyde Monroe, Arnold.
Cane Syrup	Carloads & Truckloads	Murphy, Temple, Creighton, Truscan.	Dale Billings, Upton; Walter Endman, Carlyle; Jack Preston, Clifton Wells; Elfred Young, County Agent, Fontaine.

SEED:

Maize	600 Acres	Coleville	Seth Devereaux, County Agent, Coleville.
Soybeans	5000 Bushels	Clermont	Albert Wheaten, Clermont.

HAY:                      Any Amount      Near Temple B. Renner, Temple.

At a glance, buyers can pick up a lot of information from the monthly  
availability report after which this tear sheet is patterned.

Proponents of the program also emphasize that it provides increased efficiency in marketing by getting better distribution of locally grown products. They claim that in areas where such programs are really working, better and new ways are being found to handle what otherwise would have been troublesome local surpluses.

We began this story by showing how Indiana is meeting the need for local market information. This State was chosen only as a "lead-in" to the broader scope of the work. Let's look at what's being done in a few other States, by State departments of agriculture, bureaus of markets and other State agencies with the assistance of RMA funds.

## Other State Programs

South Carolina: A new market and outlook information service on prices, demand, and surpluses of farm products, is being furnished in this State. Its purpose is to provide market information for producing areas immediately prior to or during harvest, and on selected consuming markets for the entire year. The information at present covers available supplies, prices, movements, and condition of poultry, eggs, livestock, and the leading vegetables produced in the State. It is expected to be extended to other products. In addition, a daily market report on prices and market conditions has been issued for certain vegetables at two wholesale markets, for livestock at five buying stations and several auctions, for poultry at four locations, and for eggs at one leading market. Included in the bulletins are similar reports from other markets. A weekly summary includes information for all these products as well as cotton, grain, and forest products. The information is sent to a mailing list of over 800 subscribers and is given to radio stations and press services.

North Carolina: Here, the State Department of Agriculture has a project underway calling for the obtaining and analyzing of information pertaining to production, market supplies, facilities, movements, and prices for farm products to aid in improving distribution methods and expanding market outlets. During the past fiscal year, this was limited to grain crops. It is expected that other crops will be included later.

## Many Commodities Covered

Tennessee: A project to provide services and assist in the development of an improved market news reporting system has been initiated by the State Department of Agriculture. Its purpose is to furnish more market information to producers, consumers and marketing agencies to enable them to more adequately determine market prices, demand and supply conditions, and other factors affecting the marketing of farm products. A weekly market information letter is issued giving detailed information on principal Tennessee markets for livestock, feed and grain, poultry and eggs, dairy products and other seasonal crops, in addition to teletype news from other markets throughout the country. Weekly news releases are issued to press and radio on new developments in marketing and current information relative to marketing activities in the State. A quarterly bulletin is mailed to large buyers of fruits and vegetables in Tennessee and other States giving the location, quantities of commodities expected to be available, time expected to be available, and the name of the producer or handler to contact.

Virginia: Several programs are underway by the State Department of Agriculture to provide an improved market news system adapted to local, area, and state use. One of the projects is aimed at furnishing market information to areas which heretofore have not been adequately covered through a weekly review of commodities particularly adapted for use by weekly newspapers. This mailing list grew from 10 to 42 during the 1950 fiscal year. Another program is aimed at the development of new market plans for Virginia apples and peaches, with assistance to marketing agencies through improvement of information concerning supply and location of



production by variety. Still another project provides for obtaining and analyzing new basic data pertaining to market supplies, facilities, movement, and prices to aid in improving distribution methods and expanding market outlets for Virginia farm products.

Washington: This State's Department of Agriculture has a program providing for the collection and dissemination among producers, dealers, consumers and the general public of information concerning supplies, prices, and distribution of hay and grain, fruits and vegetables, dairy and poultry, and livestock. Prices are gathered and disseminated at the farm level or at the farmers' delivery points. Prices are received daily through 500 farm gate reporters, each reporter contacting other persons selling products in his area. In addition, reports are made of market quotations at ten representative livestock auction markets out of the 42 such markets in the State. Both prices and grades are given by the reporters who are State brand inspectors.

To give a better understanding of the growing demand for this type of market information, a proposed RMA project for "special market information at the local or area level," recently submitted by a midwestern State, outlines the problem and need for work as follows:

Production of agricultural products is varied and largely scattered over the State. Fruit and vegetables are, for the most part, confined to two or three different areas. Larger proportions of agricultural products are now being purchased on the farm by truckers or other direct buyers. This condition has resulted in many requests from producers, dealers, as well as the radio and press for reliable information on a localized basis. Although the daily market news reports the prices and conditions of nearby terminal markets, local producers and dealers find it difficult to adapt these market reports to their local conditions. Many instances can be cited throughout the State where certain buyers are unscrupulously taking advantage of producers as well as small dealers who are uninformed of the current market situation as it affects their particular commodity. The problem is one of developing a market information program that will include pertinent information now available from the Federal market news services, additional information by localities or areas giving supply available, time of harvest, quality of the product, prevailing prices and other pertinent information affecting the market.

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#### TEMPERATURE EFFECTS ON STORED FRUIT JUICES

Effects of storage temperatures ranging from zero to 70 degrees Fahrenheit on flavor, color and vitamin C content of fruit juices and their concentrates are revealed in a recently issued bulletin of the New York State Agricultural Experiment Station at Geneva, N. Y.

The study covered both raw and pasteurized juices and concentrates of apples, strawberries, red, purple, and black raspberries, cherries, rhubarb, and plums. Relation of vitamin C content to changes in color and flavor also are covered in the report.

# What's in Cold Storage?

By Martin J. Hudtloff

In the highly competitive business of buying and selling food products, knowing the answers about supply and demand is a must. The Department of Agriculture, for 36 years, has been making many of the answers available to everybody through its market news services. This impartial distribution of such information has contributed strongly to orderly marketing.

However, in our contacts with farmers, brokers, wholesalers, and others in the food industry we find many instances where much greater use can be made of the market information regularly available from the Department. A case in point is a time-consuming and costly survey made recently by a firm which could have secured its information quickly in a regularly distributed report. If you're in the food industry, knowing the right answers to the following four questions may help you avoid a similar mistake.

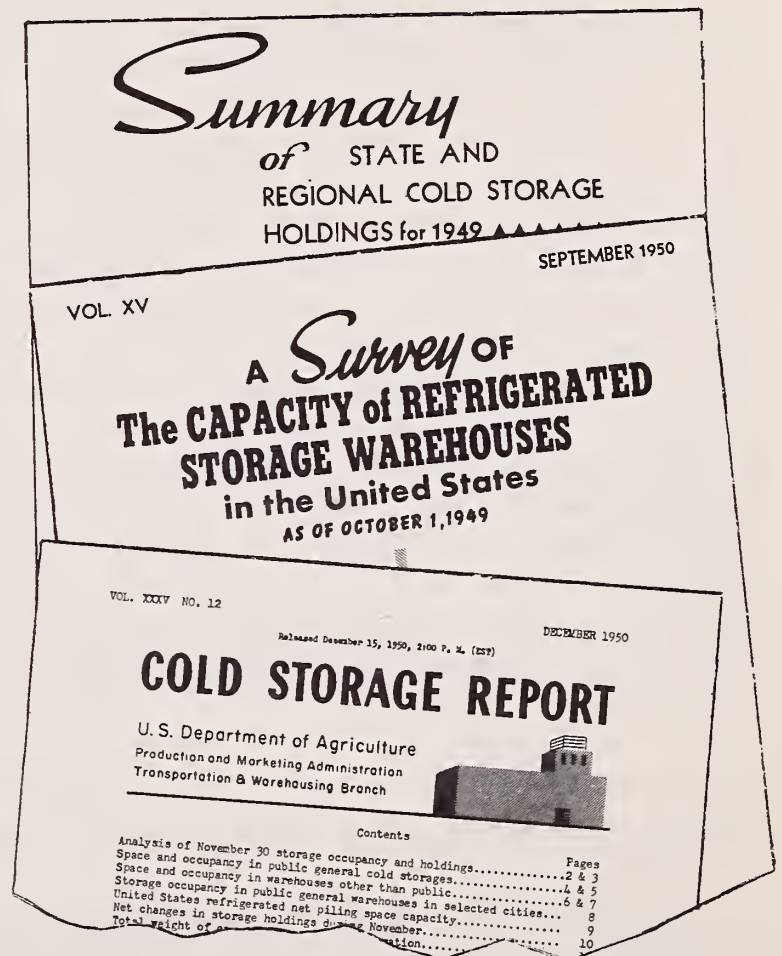
1. Where would you look for a quick summary of national storage stocks of apples, pears, or other fresh fruits?

2. Where would you go for monthly information on the amount of frozen fruits and vegetables in storage, by varieties?

3. Where could you find information on the relative availability of refrigerated storage space in each State?

4. What Government report shows quantity of some 84 food items in our Nation's refrigerated warehouses?

One correct answer to the first three questions--and the only answer to the last one--is the Cold Storage Report. If you're in the perishable food business and missed even one question then you are also missing out on some of the information the Department of Agriculture issues for your use.



Your "score" on the quiz at the left may depend on how well you know these reports.



The Cold Storage Report, released at the mid-point of each month in Washington, gives end-of-month stocks of over 80 items in refrigerated warehouses of all types. Included, for example, are all foods in public warehouses, private warehouses, semiprivate warehouses, and in meat-packing plants with refrigerated storage space. Operators of these facilities cooperate with USDA by reporting their storage stocks on a monthly basis. Many warehousemen have supported this part of the Market News Service of the Department ever since the Cold Storage Report was first released in December 1914. All information from individual warehousemen is kept in strictest confidence and is never available for purposes of taxation, investigation, or regulation. Because of this, it is possible for the Department to collect information which would not otherwise be available.

Knowledge of the relative availability of supplies is important in the buying and selling on the various commodity exchanges. Advance information can work to the detriment of those who are not fully informed. To guard against "leaks," all precautions are taken in the preparation of the Cold Storage Report. Until release date, 2 p.m., (EST) on the 15th of each month, the information is locked in a safe. All employees working on the report are sworn not to use their position as a means for speculating, under penalty of a fine and imprisonment.

#### Report Punctual

Market news must be accurate, complete, and as up-to-date as possible. The Cold Storage Report meets all these requirements. During the first half of each month, reports are received and tabulated from almost 1,800 warehouses. The Cold Storage Report has always met its deadline release date--with but one exception--in its 36-year history. That exception occurred in 1945 when all Government agencies were closed in observance of VJ day.

To speedily disseminate data on national storage stocks, the market news leased wire system of the Department is used extensively. On an average, approximately 87 market news offices are connected by about 11,000 miles of specially leased wire. Each market news office uses information from that part of the Cold Storage Report that pertains to commodities handled by that particular office. This system enables those who are interested in butter stocks, for example, or cheese, or shell eggs--or any of the other food items in storage--to have the information as soon as it is made available in Washington, instead of waiting until the mimeographed reports are mailed.

Information on national storage stocks is only one part of the extensive market information covered in the Cold Storage Report. For those interested in market supplies in their particular region, detailed information on all commodities is provided, according to nine geographic regions of the United States. Even more complete data is shown for such commodities as cream, butter, cheese, shell eggs, frozen eggs, and poultry in a table on storage stocks by States.

Many growers, shippers, and others engaged in marketing have found, on occasion, that storage space in their area has been filled to capacity because of unusually heavy production. Many times these problems have been solved only after costly delays or perhaps loss in the commodities themselves. In such situations, the answer might well have been found in the Cold Storage Report. Each month, along with commodity statistics, warehouse operators indicate the amount of their total space utilized for foodstuff storage. Storage occupancy, by States, for both cooler (29°F. to 50°F.) and freezer (29°F. and below) temperature ranges are also reported.

Another part of the Cold Storage Report entitled "A Survey of the Capacity of Refrigerated Storage Warehouses in the United States" has been prepared biennially since 1921. This survey gives the number of plants in operation; capacity, by States, and temperature range; and the distribution according to type of warehousing operation. It too, is available free of charge.

The primary value of a market news service is that of supplying information that will aid orderly marketing. Information sources such as the Cold Storage Report, the Directory of Refrigerated Warehouses, and the Survey of the Capacity of Refrigerated Storage Warehouses, have a long record of invaluable help to the entire perishable food industry.

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#### HOW COOL IS A CUCUMBER CURED?

It looks like the day is past when you can simply toss cucumbers into a brine and expect them to come out pickles. The bacteriologists of the New York State Agricultural Experiment Station have shown that in addition to the proper brine, a temperature range of 75 to 86 degrees Fahrenheit is an important factor in the fermenting and curing process. Results of the study have been published in a bulletin available from the Geneva station.

"Cucumbers for pickles are packed in the summer and early fall without much attempt to control temperatures, and many cucumbers in brine are incompletely cured even after holding for several months," says Dr. Carl S. Pederson, Station bacteriologist.

Temperature of the fermenting brine has a marked effect upon the bacterial content, the types of bacteria, the rate and degree of fermentation, and the rate of curing of cucumber stock. Best results were obtained with a brine concentration of  $3\frac{1}{2}$  to 5 percent salt maintained in the recommended temperature range, points out the bacteriologist.

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#### WHERE IT GOES

Potato retail prices have been broken down, by marketing function, in "Farm-to-Retail Margins for Marketing Southeastern Early White Potatoes in Philadelphia, New York, Chicago, and Cincinnati, 1949," available from the Bureau of Agricultural Economics.



# Progress in Shell Egg Packaging

By O. F. Johndrew, Jr.



How about a barrel of eggs? Sounds strange, doesn't it? Back about the turn of the century, however, barrels, boxes, baskets, and tubs were the accepted containers for handling this breakfast special. In fact, the only other competitor for the job was a container equally as bulky and unhandy--a box of heavy, sawn wood made up of trays in which the eggs were held in wire clips.

Today's packaging represents quite a change. Those unwieldy shipping and storage packages have been replaced by lightweight containers of fiberboard and wood veneer which have reduced materials and handling costs.

There have been changes in the retail handling of eggs also which have occurred in a shorter period of time. Less than twenty years ago almost all eggs sold at retail were sold in bulk form in a paper sack, basket or box. Although in some parts of the country considerable quantities of eggs are still sold in paper bags, you would have to look hard to find city retailers who don't sell eggs in the standard paperboard cartons, some of which are perforated so that a half dozen can easily be torn off.

## Progress Displayed at Exhibition

These changes in egg handling were highlighted in an exhibit at the recent exposition held in Harrisburg, Pennsylvania, by the Northeastern Poultry Producers Council. This display of the history of egg and poultry packaging over the past fifty years, in addition to stimulating interest in modern handling methods, also refutes to a large extent the charges or complaints that the poultry industry is lagging in the adoption of modern packaging methods.

There has been considerable progress made during the past half century in shell egg packaging, although it has been neither revolutionary nor dramatic. For the most part, it has been caused by basic changes in egg handling and merchandising. The early changes in the wholesale shipping boxes came about as a result of such factors as the changing supply of materials, improvements in handling and transporting which permitted the use of lighter, more resilient containers, the development of new inner packing materials, and attempts to reduce the costs of packaging.

The recent changes in the 30-dozen egg case have been primarily due to the fact that compared to 30 years ago larger eggs are now being shipped. Modifications in retail containers have been largely prompted by changing sales techniques in the large metropolitan areas. For example, the self-service retailer must satisfy the buyer's desire for a small, durable and compact package such as the modern egg carton.

### Package Requirements

According to packaging experts, the main functions of a package or container are usually given as protection, economy, convenience, and appeal. These functions are interrelated, with the first two most important for wholesale packages and the latter three for many retail containers. Let's look at the modern wholesale package for eggs--the shipping container--to see how it meets these requirements.

Fifty years ago the barrels and heavy wood cases used for this purpose fitted the needs of the day. Transportation, even by railroad, was pretty rough. There were no trailer-trucks operating over smooth highways. A substantial container affording a lot of protection was essential. In addition, the egg production cycle then was quite pronounced--that is, production was more seasonal than now--necessitating considerably more storage over a longer period of time than is now the case. Thus, a storage container that had durability as well as strength was a necessity.



Almost as heavy as the barrel, though easier on the eggs, was the wooden box on the left. In it, each egg was suspended by 2 wire loops, comparable to those which fasten lamp shades to light bulbs today. The early, 15-dozen container in the center has clumsy fillers and flats, but in form it is a forerunner of the light, modern 30-dozen container on the right.

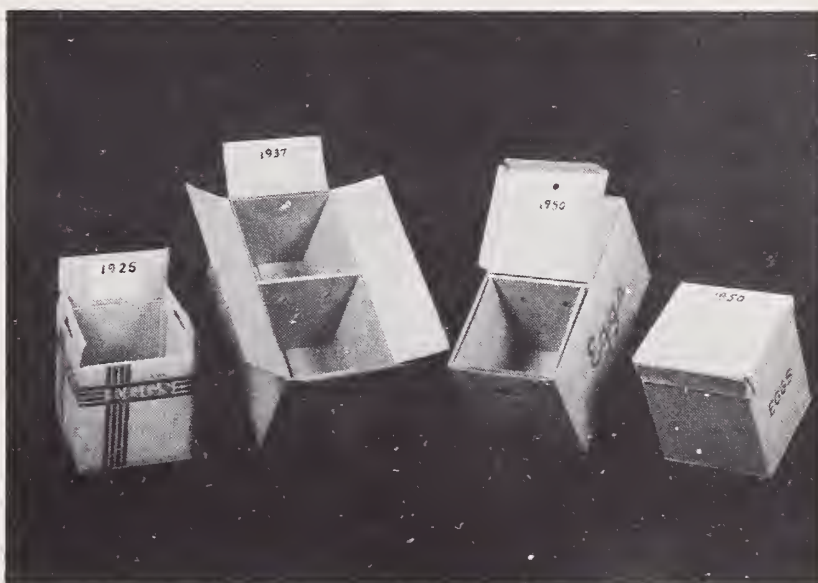
Today, transportation and handling facilities have improved. The use of trailer-trucks for the transportation of eggs and other developments would make the old heavy barrels and boxes not only uneconomical but unnecessary since the added rigidity is not needed. Modern fillers and flats used as inner packaging materials for egg cases would not protect the eggs as well if used in the older, heavier boxes or cases, as they do in the present standard 30-dozen wood or fibre egg cases. These fillers and flats probably would have to be made more rigid, which would mean more material, or material of better quality. Consequently, it would cost more to provide the same protection they give in the present day standard cases.



Wholesale transactions in eggs are usually made with a 30-dozen case of eggs as a basis of understanding. In contrast, the old wood and wire case held 240 eggs while the barrels and other containers held different numbers of eggs, depending on how much straw, shavings, or bran were used as inner packing material. The irregular size naturally increased handling and transportation problems. Today's standard 30-dozen egg case fits into railroad cars and trucks better than would the old containers.

### Two Considerations

Any package should provide adequate protection for the normal life of a product plus a reasonable margin of safety. The standard 30-dozen egg cases used today do just that. Even the so-called 1-trip or truck fibre cases satisfy this requirement which takes into consideration both protection and economy. The initial cost of this case is comparatively low and it is usually used for relatively short (in time) trips by truck. Such cases should not be returned to a shipper or used for storage simply because they do not meet the requirements of re-use, or extended storage. Both shipping containers -- the standard 30-dozen case and the "one trip" or truck container -- are convenient to handle and, when new and clean, have sufficient "appeal" for this type of package.



Fibre cases have changed little in general form since their introduction about 25 years ago. More important than might appear, however, are the inside dimensional changes and the improvements which have been incorporated in today's fillers and flats.

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Dimensional changes in wholesale containers have been limited, with the exception of the adaption of the 30-dozen case which occurred about 50 years ago. Up to 1946 there was very little change in the specifications of this container. In 1946, a quarter of an inch was added to the inside depth and in 1950 another quarter of an inch was added, making the inside standard depth 13 inches (standard "not less than 13 inches").

Fiber cases have been on the market for approximately 25 years, although some promotional work was begun years earlier. During World War II, they were put on the market in great quantities to take care of the egg supply and as a substitute for wooden cases which were not available in volume due to a lack of materials for their construction. Up until 1946, attempts at standardizing inside dimensions had progressed very little. In that year, some of these cases were recommended as standard by the U. S. Department of Agriculture and the same changes in inside dimensions were made for these cases in 1946 and 1950 as were made in the wooden cases. Today fiber cases meeting certain specifications are standard.

Although fillers were introduced even before 1900 they remained, until recent years, generally the same in specification. In 1946, their height was increased slightly and in 1950 the inside length and width of each filler cell was increased slightly.

In 1950, 1/16 of an inch was added to the length of the posts on the bottom of the standard cup flats. Also, in 1950, the shape of the cups on these standard flats was changed from round or diamond shape to an octagonal or round design. The cups now are a little larger. These changes in egg cases, fillers, and cup flats were made to accommodate the larger eggs being shipped today, as compared to 30 years ago.

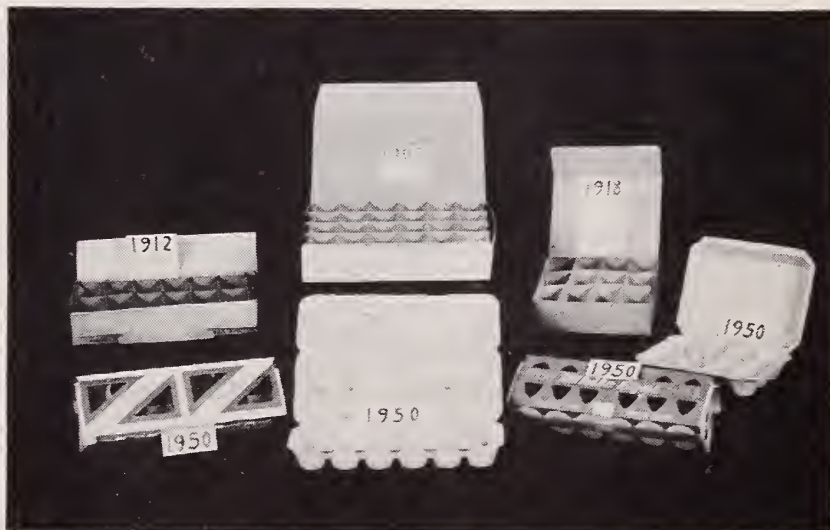
Now let's evaluate the retail containers for shell eggs and see how they meet the requirements for a "package" as outlined above.

In the early 1900's, eggs were displayed in stores in barrels, boxes, baskets, and tubs. Picture the displaying and selling of eggs in these containers in modern chain stores! Although patents on egg cartons were taken out as far back as about 1870, and they have been used commercially since about 1899, it was not until recent years that large retail and chain stores adopted the 2x6 cartons (2 rows of 6 eggs each) so extensively. These satisfy the need of modern retailers and also provide consumers with home storage containers.

#### Appearance Improved

While it is true that there hasn't been much change in the general form, kind or type of the 2x6 and the 3x4 cartons (3 rows of 4 eggs) first used commercially in 1904 and 1899 respectively, they have improved in style and appearance. Also, generally speaking, except for 1 or 2 areas in the country, retailers have gone from 3x4 cartons to 2x6 cartons for displaying and selling shell eggs. Some stores are using cartons with "window" covers in keeping with the trend toward more complete display of the product. Such cartons satisfy the functions of protection and economy, convenience and appeal, particularly when compared with the older methods of displaying and selling eggs.

From this summary it can be seen that present day shell egg packages do satisfy the needs of marketing from producer to consumer. They fill present day requirements for economical protection. Although it appears to have progressed slowly, the development of shell egg packaging has kept pace with the requirements of the industry.



Retail containers need to combine appeal with protection, and at the same time be economical and reasonably durable. Here too, modern improvements have been featured more by changes in fine detail than general form.



Since about 1945, poultry and related industry representatives have been working with the U. S. Department of Agriculture to plan programs for the establishment of poultry and egg packaging standards and practices. They first worked with the Department as an "interested group." More recently, an industry group advisory to the Department was formed, called the "Poultry and Egg Packaging Task Group." This body is composed of representatives from poultry and related industry associations and organizations. With this type of cooperation in planning, the Department has developed recommended package specifications for shell, dried and frozen eggs; and live, dressed and ready-to-cook poultry.

Unquestionably, as time goes on and if a need for different kinds, types, styles or sizes of poultry and egg packages arises, there will be changes made. Certainly with such cooperation between Industry and the Department, necessary progress will be maintained.

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### FLUID MILK LEADS DAIRY PRODUCTS GAINS

Among dairy products, fluid milk is leading the gains in consumption of principal foods produced by the dairy industry. In the last decade per capita utilization of dairy products in the form of milk and cream has increased 12 percent, or from 343 to about 385 lbs. per year.

Modern handling and refrigeration techniques have, of course, made it easier to market fresh milk, and these improvements have contributed to the trend. But not the least of the factors is the unparalleled all-inclusiveness of milk's components--the reasons why scientists call it the perfect food. Consumers apparently have found this out for themselves. Possessing greater income, they have bought increasing amounts of a food they like.

Anyone who still has his doubts about milk's contribution to nutritional needs should take a look at "The Food Value of Dairy Products," by W. E. Krauss, summarized in OHIO FARM AND HOME RESEARCH, November-December 1949.

While Mr. Krauss discusses milk's shortcomings as well as its virtues, the latter steal the show. Milk's butterfat contains all known fat-soluble vitamins and is almost 100 percent digestible; its protein is made up of casein, albumin, and globulin, which in turn contain all known amino acids (the substances which determine the biological value of proteins); lactose, a carbohydrate found only in milk has a beneficial effect on absorption and utilization of calcium by pre-school children; milk's supply of minerals reads like a strategic materials roster--calcium, phosphorus, potassium, sodium and chlorine are present in relatively large quantities and in addition are smaller amounts of iron, copper, manganese and iodine, and trace quantities of silicon, boron, titanium, vanadium, rubidium, lithium and strontium; its vitamins are carotene, vitamins A and D, which vary in amounts according to feeding and management practices, and ascorbic acid and riboflavin. And as if the cow herself hadn't done well enough by her product, many distributors are fortifying milk with vitamin D at the rate of 400 U. S. P. units per quart.

# Marketing Briefs

(The Production and Marketing Administration announcements summarized below are more completely covered in press releases which may be obtained on request from the Office of Information, U. S. Department of Agriculture, Washington 25, D. C. by citing the code number given at the end of each item.)

Dairy.--Sale of 4,900,000 pounds of BUTTER, on a competitive bid basis, has been announced. This is about the last of the CCC inventory of butter acquired under a price support program which began in February 1949. CCC purchases over the entire period totaled about 242 million pounds which were disposed of as follows: about 123 million pounds, sold in domestic market;  $5\frac{1}{2}$  million pounds, sold for export; 51 million pounds, distributed to school lunch and domestic donation programs; and  $37\frac{1}{2}$  million pounds, donated for foreign relief. Of the remaining 25 million pounds, 20 million had been committed for sale or other disposition at the time that the balance of 4,900,000 pounds was offered for sale. (USDA 105-51).

Sale of 15 million pounds of government-owned nonfat DRY MILK solids to the United Nation's International Children's Emergency Fund for use in school lunch and child feeding programs abroad, has been announced. Unsold supplies of the commodity in CCC inventory as of January 2, 1951, amounted to 204 million pounds. (USDA 47-51)...The Federal order regulating the handling of MILK in the St. Louis, Mo., milk marketing area has been amended to limit the decrease scheduled for January 1 to 25 cents per hundredweight instead of the originally scheduled 37 cents, which was made up of 25 cents for the regular seasonal decline during January to March, plus a 12 cent "supply-demand" adjustment. (USDA 3094-50)...MILK marketing orders covering Chicago, Suburban Chicago, South Bend-LaPorte, Ind., Milwaukee, Wis., and Rockford-Freeport, Ill., have been amended to establish Class I and Class II milk prices for January through March at November 1950 levels. (USDA 3101-50).

The Kansas City, Mo., milk marketing order has been amended to classify milk in three grades, account for milk on the basis of its skim milk and butterfat content, base prices for surplus milk on Midwest prices for manufacturing milk, revise location adjustments for both handlers and dairy farmers, and to require a milk plant to dispose of at least 15 percent of its producer receipts to other pool plants before such receipts can be included under the pricing provisions of the order. (USDA 3114-50)...The Duluth-Superior MILK marketing order has been amended to provide changes in May-August and September-April differentials, provide a premium payment plan for fall milk production, account for milk on the basis of skim milk and butterfat content, reduce the classes of milk to two, increase the administrative assessment on milk, and clarify provisions covering excess sales of skim milk and butterfat. (USDA 3120-50).



Fats and Oils.--Import controls, under Public Law 590 (81st Congress) have been lifted for crude, refined, and denatured cottonseed oil, soybean oil, sunflower seed oil, lard compounds, lard substitutes, combinations and mixtures of animal and vegetable oils, soybeans and sunflower seed. The only commodities now remaining under import control under the law are butter and butter oil, peanuts, peanut oil, peanut butter, flaxseed, flaxseed screenings, linseed oil, rice and rice products. (USDA 108-51)...During the period October 1, 1950 through January 12, 1951, Commodity Credit Corporation purchased 13,054,000 pounds of crude SOYBEAN OIL and 1,904,000 pounds of refined SOYBEAN OIL. (USDA 113-51)...Marketing quotas for PEANUTS in 1951, 1952, and 1953, were approved by approximately 71 percent of the growers who voted in the referendum held December 14, 1950 in the 16 producing States. (USDA 3035-50).

Fruits and Vegetables.--Georgia PEACH growers, in a referendum vote held during the period December 9 to 16, 1950, favored continuance of the amended marketing agreement and order regulating interstate shipment of peaches grown in that State. By number, 94 percent of the voting producers favored continuance. (USDA 64-51)...The current program to encourage both new domestic uses and the exportation of HONEY will be continued during 1951. Payments of not more than 4.5 cents per pound will be made to packers who sell honey into diversion outlets at market price less the amount of the payment. The diversion outlet must be approved by the Department and the honey must be employed by the outlet before payment can be claimed. Payments will be made to exporters of honey at the rate of 4.5 cents per pound or 50 percent of the f.a.s. sales price or of the domestic market price, whichever is lowest. Approximately 10.5 million pounds of honey moved under the program in 1950. (USDA 3069-50).

Beginning January 8, 1951, only potatoes meeting the requirements of U.S. No. 1 or better grade may be shipped from the Idaho-Malheur County (Oregon), Klamath Basin (Oregon-California), and Washington area. Action was taken on the recommendation of potato committees operating Federal marketing agreement programs in the respective areas. (USDA 3098-50).

Grain.--NO acreage allotments on 1951 crops of CORN and WHEAT. In making this announcement, Secretary of Agriculture Charles F. Bramman stressed the need for maximum production of these basic food and feed grains as an "essential safeguard in the national defense program". No marketing quotas for 1951 crops of both grains had been announced previously. (USDA 44-51)...A market news service giving local market information on grain by-product feeds, oilseed meals, and commercial feeds was scheduled to start on an experimental basis in Minnesota during January 1951. The project is designed to test the feasibility of collecting and reporting supply, demand and prices on these commodities at distributing centers where farmers buy their feeds. The reports will cover trading activities at ten points in the principal dairy and poultry sections of the State. (USDA 3067-50)...USDA has purchased 2,000,000 pounds of defatted SOYA FLOUR for export to Greece under the ECA program. In Greece, the soya flour will be mixed with 92 percent extraction wheat flour in a proportion of 5 percent soya flour and 95 percent wheat flour for the production of bread. (USDA 65-51).

Livestock.--Canned and cooked meats and meat food products from Mexico are now permitted entry to the United States. The change, effective as of December 30, 1950, does not have any effect on the restrictions that prohibit entry of fresh, chilled, or frozen meats from Mexico. This restriction is applied to all countries in which the contagious foot-and-mouth disease is known to exist. (USDA 3116-50).

Poultry.--Final date for compliance with new requirements under USDA's voluntary dressed poultry (New York dressed) grading and inspection program has been officially extended to May 1, 1951. Previously, the deadline was January 1, 1951.

Sugar.--Sugar quotas for 1951 totaling 8,000,000 short tons have been set for domestic cane and beet producers and off-shore cane areas. A deficit of 200,000 tons in the statutory quota for the Philippines has been prorated to Cuba, Peru, Mexico, Haiti and the Dominican Republic. In announcing the over-all quota, Secretary of Agriculture Charles F. Brannan stated that it would permit unrestricted domestic consumption and the maintenance of present stocks, desirable in view of the national emergency. The 1951 total quota is under the final quota of 8,700,000 tons in 1950, but is above the initial determination of 7,500,000 for last year. (USDA 3078-50) (USDA 3083-50)...Minimum wage rates to be paid by producers to workers employed in the production and cultivation of sugarcane in Louisiana (USDA 82-51) and in production of sugar beets in California, southwestern Arizona and southern Oregon (USDA 3080-50) have been announced. Producers must meet the wage rates as one of the conditions of eligibility for payments under the Sugar Act of 1948.

Tobacco.--Price support loan rates for 1950 crop Connecticut Broadleaf (type 51) and Havana Seed tobacco (type 52) have been announced. Loans will be available to growers on a grade basis at an average level of 49 cents per pound for Connecticut Broadleaf and 49.5 cents per pound for Havana Seed tobacco from that State. (USDA 3017-50).

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## PIG CROPS AND HOG SLAUGHTER

Larger annual pig crops resulted in an increase in hog slaughter in 1949 and again in 1950; and the continued uptrend in pig crops will bring another increase in hog slaughter in 1951, reports the Bureau of Agricultural Economics in the Livestock and Meat Situation for December, 1950.

The 1950 fall pig crop was 9 percent larger than the 1949 fall crop, and a 6 percent increase in the 1951 spring crop over the 1950 crop is indicated by farmers' intentions declared on December 1. BAE estimates that around 4 million more hogs may be slaughtered in 1951 than in 1950. If slaughter weights are no lighter than during 1950, total peak production will be sufficient to fill the military requirements now in prospect and allow for a small increase in civilian consumption per person, states BAE.



## ABOUT MARKETING

The following addresses and publications, issued recently, may be obtained upon request. To order, check on this page the publications desired, detach and mail to the Production and Marketing Administration, U. S. Department of Agriculture, Washington 25, D. C.

### Addresses:

Democracy Must Go Forward, a talk by Secretary of Agriculture Charles F. Brannan at annual meeting of Production and Marketing Administration, Chicago, Ill., December 13, 1950. 17 pp. (Processed)

PMA Responsibility in National Defense, an address by Administrator Ralph S. Trigg at opening of Annual Conference of PMA, Chicago, Ill., December 11, 1950. 13 pp. (Processed)

An address by Frank K. Woolley, Deputy Administrator, PMA, at the Annual PMA Conference, Chicago, Ill., Dec. 11, 1950. 8 pp. (Processed)

Mobilized Marketing, speech by John I. Thompson, Asst. Administrator, PMA, at the annual PMA conference in Chicago, Dec. 13, 1950. 13 pp. (Processed)

### Publications:

Methods and Costs of Producing Alcohol From Grain by the Fungal Amylase Process on a Commercial Scale. Technical Bulletin No. 1024. August 1950. 38 pp. PMA and Bureau of Agricultural and Industrial Chemistry. (Printed)

Facts about the present Cotton Situation and the need for increased production in 1951. PA-148. December 1950. 12 pp. (PMA) (Processed)

Sanitary Milk and Ice Cream Legislation in the U. S. Bulletin No. 121, July 1950. National Research Council and PMA cooperating. (Printed)

United States Standards for Grades of Cheddar Cheese. (15 F.R. 8233) December 1950. 35 pp. (PMA) (Processed)

Consumer Purchases of Selected Fresh Fruits, Canned and Frozen Juices, and Dried Fruits in November 1950. Dec. 1950. 5 pp. Bureau of Agricultural Economics and PMA cooperating. (Processed)

Relation of Appearance of Long-Draft Processed Carded Yarn to Six Elements of Raw Cotton Quality and Yarn Size. November 1950. 53 pp. (Processed)

### ABOUT MARKETING (Cont'd)

Scorched Particle Standards for Dried Milks Developed, by D. R. Strobel and C. J. Babcock, Dairy Branch. December 1950. 6 pp. (PMA) (Processed)

Annual Report on Tobacco Statistics 1950. S.B. No. 92. 72pp. (PMA) (Printed)

Notices of Judgment Under the Insecticide Act, 2016-2040. November 1950. 16 pp. (PMA) (Printed)

Notices of Judgment Under the Federal Insecticide, Fungicide, and Rodenticide Act, 1-25. October 1950. 12 pp. (PMA) (Printed)

U. S. Consumer Standards for Italian Sprouting Broccoli. (Effective October 28, 1950) 3 pp. (PMA) (Processed)

U. S. Standards for Bunched Beets. (Effective November 4, 1950) 3 pp. (PMA) (Processed)

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